

CLAIMS:

1. A method of operating a device in a wireless network to receive broadcast messages as well as point to point communications, the method comprising:

waking up the device at a preprogrammed time;

upon waking up at the preprogrammed time, receiving a first message that includes a broadcast indicator code that identifies a broadcast category or a specific broadcast;

comparing the first broadcast indicator code to one or more stored codes indicative of broadcasts subscribed to; and

in a first case that it is determined that the broadcast indicator code does not match any of the one or more stored codes going into sleep mode; and

in a second case that it is determined that the broadcast indicator code matches one of the one or more stored codes, operating the device to receive the a broadcast.

2. The method according to claim 1 wherein:

waking up the device at the preprogrammed time comprises waking up the device at a preprogrammed time that is a function of an ID of the device.

3. The method according to claim 1 wherein:

receiving the first message comprises receiving a communication indicator that includes paging indicator symbols indicative of whether or not there is an incoming point-to-point communication for the device along with the broadcast indicator code.

4. The method according to claim 1 further comprising:

in the second case, prior to operating the device to receive the at least one broadcast;

receiving a second message indicative of a subcategory of the broadcast; and

comparing the subcategory of the broadcast to information indicative of subcategories to which the device is subscribed that is stored in the device, wherein operating the device to receive the broadcast is contingent upon a

match being found between subcategory information received in the second message, and subcategory information stored in the device.

5 5. The method according to claim 1 further comprising:
prior to waking up, receiving and storing the one or more stored codes.

6. A method of operating fixed infrastructure of a communication network to
transmit broadcasts, the method comprising:
for each wireless device among a plurality of wireless devices to which a
10 broadcast is to be transmitted:

determining a transmit time based on an ID of each of the wireless devices
among the plurality of wireless devices;

15 at each transmit time transmitting a first message that includes a broadcast
indicator code that identifies a broadcast category or a specific broadcast to one or
more of the plurality of wireless devices having ID's corresponding to the transmit
time; and

transmitting the broadcast to the plurality of wireless devices.

20 7. The method according to claim 6 further comprising:
after transmitting the first message and prior to transmitting the broadcast:
transmitting a second message that includes broadcast subcategory
information.

25 8. The method according to claim 7 wherein transmitting the second message
comprises:
transmitting channel information for the broadcast.

9. The method according to claim 6 wherein transmitting the first message
comprises transmitting parity bits error for the broadcast indicator code.

30 10. The method according to claim 6 wherein transmitting the first message
comprises:
transmitting information that indicates whether or not each of the plurality of
wireless devices are intended recipients of a point-to-point communication.

11. The method according to claim 6 wherein transmitting the first message comprises:

transmitting paging indicator symbols along with the broadcast indicator code.

5

12. A user equipment device for use in a wireless³ communication network the device comprising:

a transceiver;

a memory for storing a program for the user equipment device;

10

a processor coupled to the transceiver, and to the memory, wherein the processor is programmed by the program to:

wake up the device at a preprogrammed time;

upon waking up at the preprogrammed time, receive a first message that includes a broadcast indicator code that identifies a broadcast category or a specific broadcast;

15

compare the broadcast indicator code to one or more stored codes;

in a first case that it is determined that the broadcast indicator code does not match any of the one or more stored codes going into sleep mode; and

20

in a second case that it is determined that the broadcast indicator code matches one of the one or more stored codes operating the device to receive the a broadcast.

13. The user equipment device according to claim 12 wherein:

25

in waking up the device at the preprogrammed time the processor is programmed to wakeup the device at a preprogrammed time that is a function of an ID of the device.

14. The user equipment device according to claim 12 wherein:

30

in receiving the first message the processor is programmed to receive a communication indicator that includes paging indicator symbols indicative of whether or not there is an incoming point-to-point communication for the device along with the first code.

15. The user equipment device according to claim 12 wherein:
the processor is programmed to:

in the second case, prior to operating the device to receive the
broadcast,

5 receive a second message indicative of a subcategory of the
broadcast; and

compare the subcategory of the broadcast to information
indicative of subcategories to which the device is subscribed that is
stored in the device, and operate the device to receive the broadcast if a
10 match is found between subcategory information received in the
second message, and subcategory information stored in the device.

16. The user equipment device according to claim 12 wherein the processor is
programmed to:

15 receive and storing the one or more stored codes prior to waking up.

17. A communication system comprising infrastructure that is configured to:
for each wireless device among a plurality of wireless devices in the
communication system to which a broadcast is to be transmitted:

20 determine a transmit time based on an ID of each of the wireless devices
among the plurality of wireless devices

at each transmit time transmit a first message that includes a broadcast
indicator code that identifies a broadcast category or a specific broadcast, to one or
more of the plurality of wireless devices having ID's corresponding to the transmit
25 time; and

transmit the broadcast to the plurality of wireless devices.

18. The communication system according to claim 17 wherein the infrastructure is
configured to:

30 after transmitting the first message and prior to transmitting the broadcast:

transmit a second message that includes broadcast subcategory
information.

19. The communication system according to claim 18 wherein the infrastructure is configured to

transmit channel information for the broadcast in the second message.

5 20. The communication system according to claim 17 wherein the infrastructure is configured to:

transmit parity bits error for the broadcast indicator code.

10 21. The communication system according to claim 17 wherein the infrastructure is configured to:

transmit information that indicates whether or not each of the plurality of wireless devices are intended recipients of a point-to-point communication in the first message.

15 22. The communication system according to claim 17 wherein the infrastructure is configured to:

transmit paging indicator symbols and the broadcast indicator symbols in the first message.